

4 Biomek Set-up

Figure 1

Inventor: Glen A. Evans
Attorney Docket No. P-EA 5160

Genewriter - Oligonucleotide Pooling Plan

	F-A1	F-A2	F-A3	F-A4	F-A5							
	R-A1	R-A2	R-A3	R-A4	R-A5							
	1	2	3	4	5	6	7	8	9	10	11	12
A	○	○	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	○	○	○
F	○	○	○	○	○	○	○	○	○	○	○	○
G	○	○	○	○	○	○	○	○	○	○	○	○
H	○	○	○	○	○	○	○	○	○	○	○	○

	1	2	3	4	5	6	7	8	9	10	11	12
A	○	○	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	○	○	○
F	○	○	○	○	○	○	○	○	○	○	○	○
G	○	○	○	○	○	○	○	○	○	○	○	○
H	○	○	○	○	○	○	○	○	○	○	○	○

Figure 2

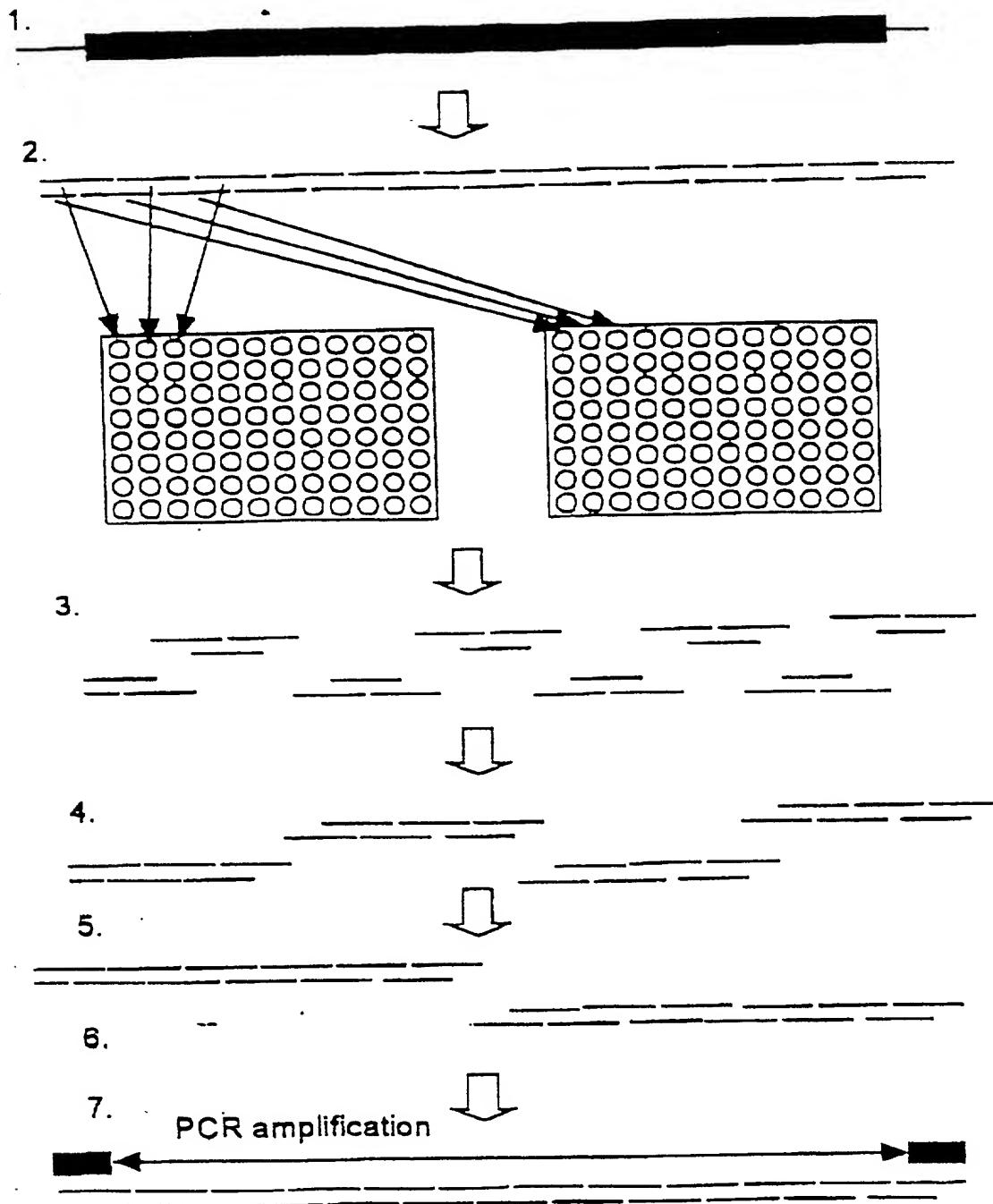


Figure 3

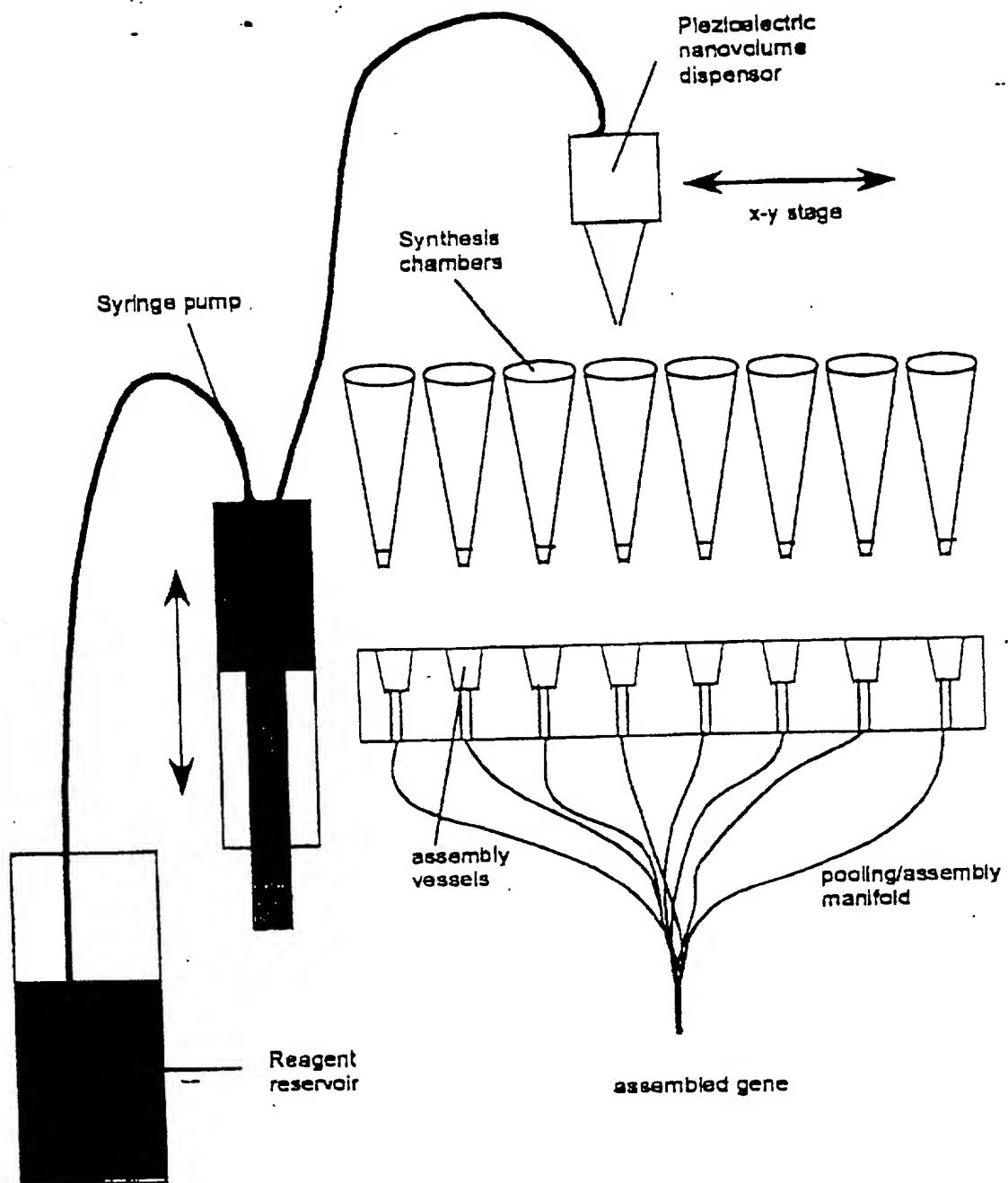


Figure 4

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Attorney Docket No. P-EA 5160

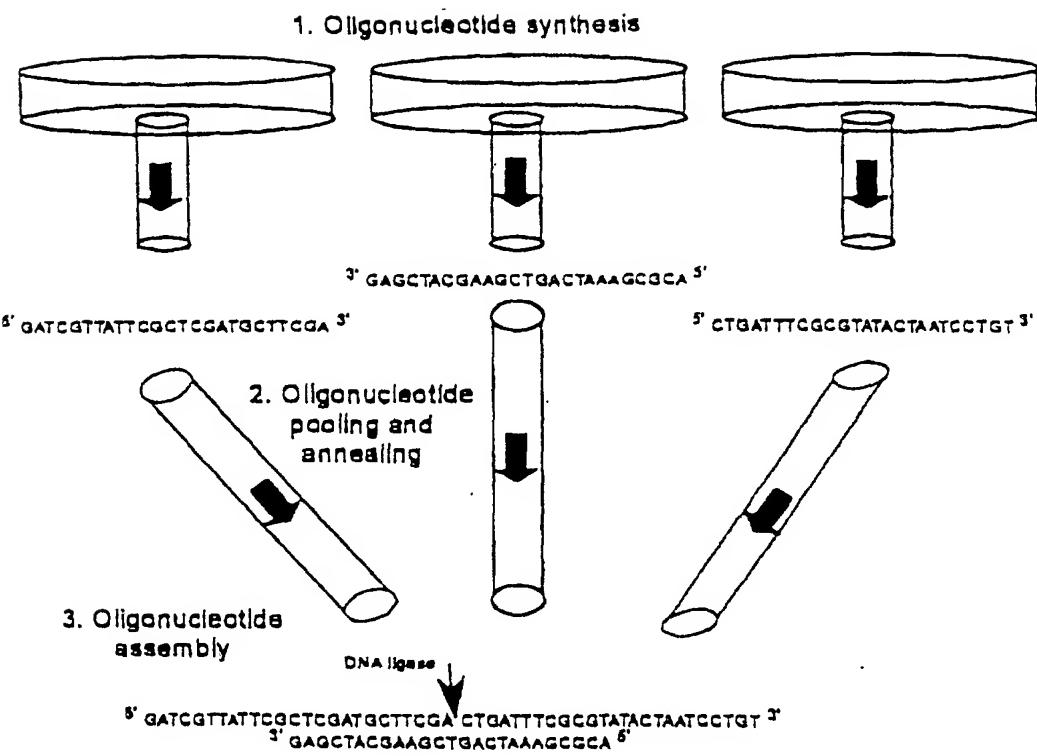


Figure 5

Inventor: Glen A. Evans
Attorney Docket No. P-EA 5160

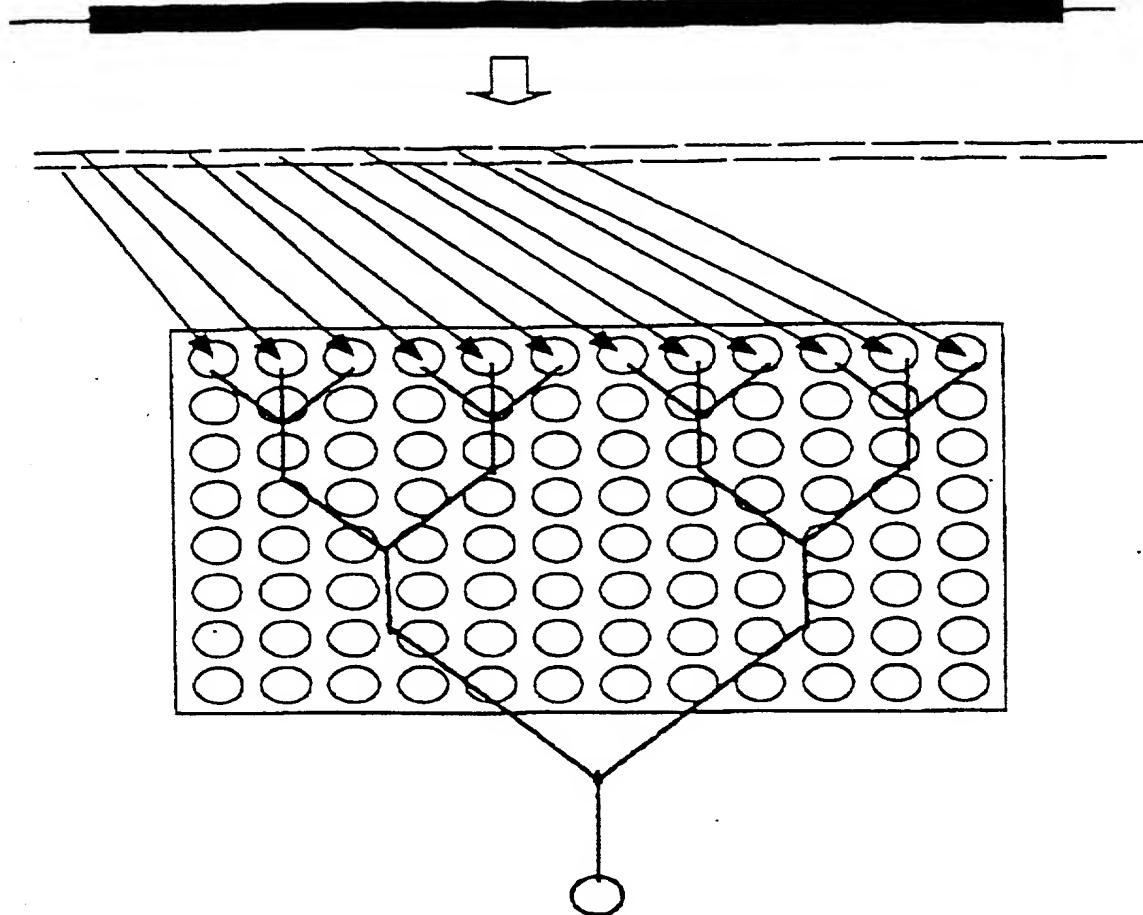


Figure 6

Inventor: Glen A. Evans
Attorney Docket No. P-EA 5160

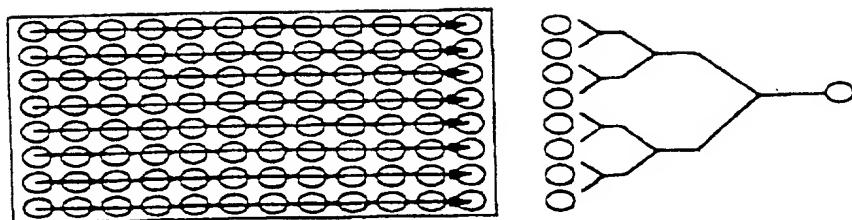


Figure 7

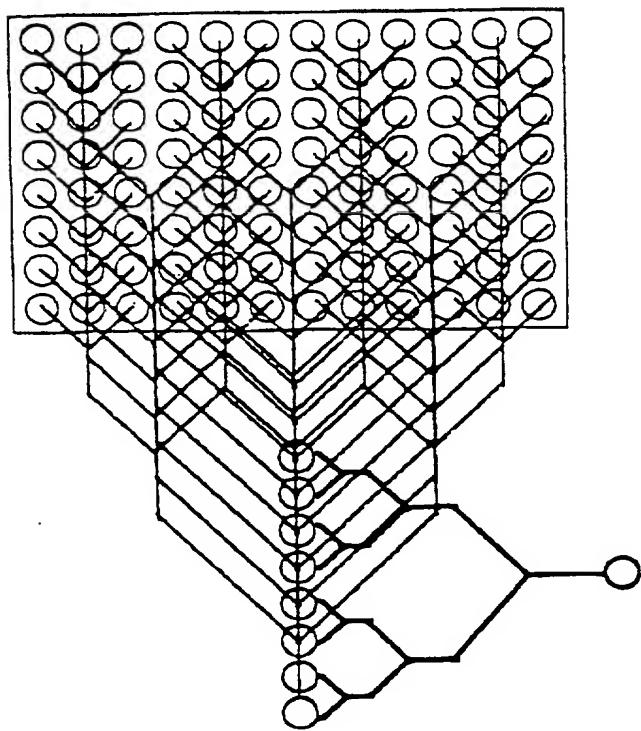


Figure 8

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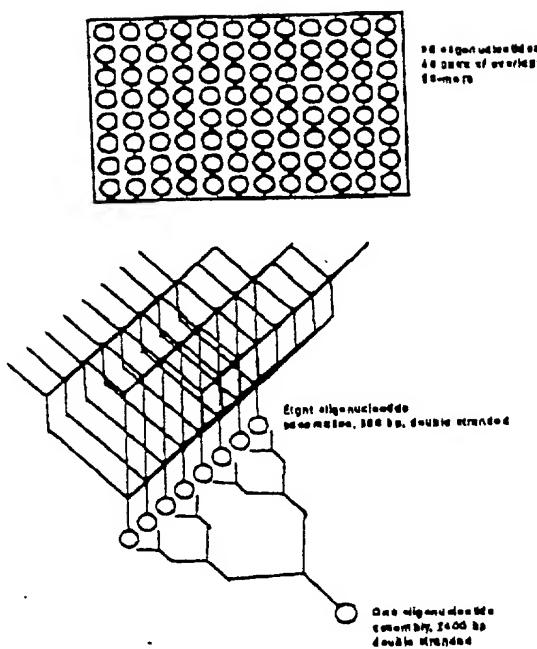


Figure 9

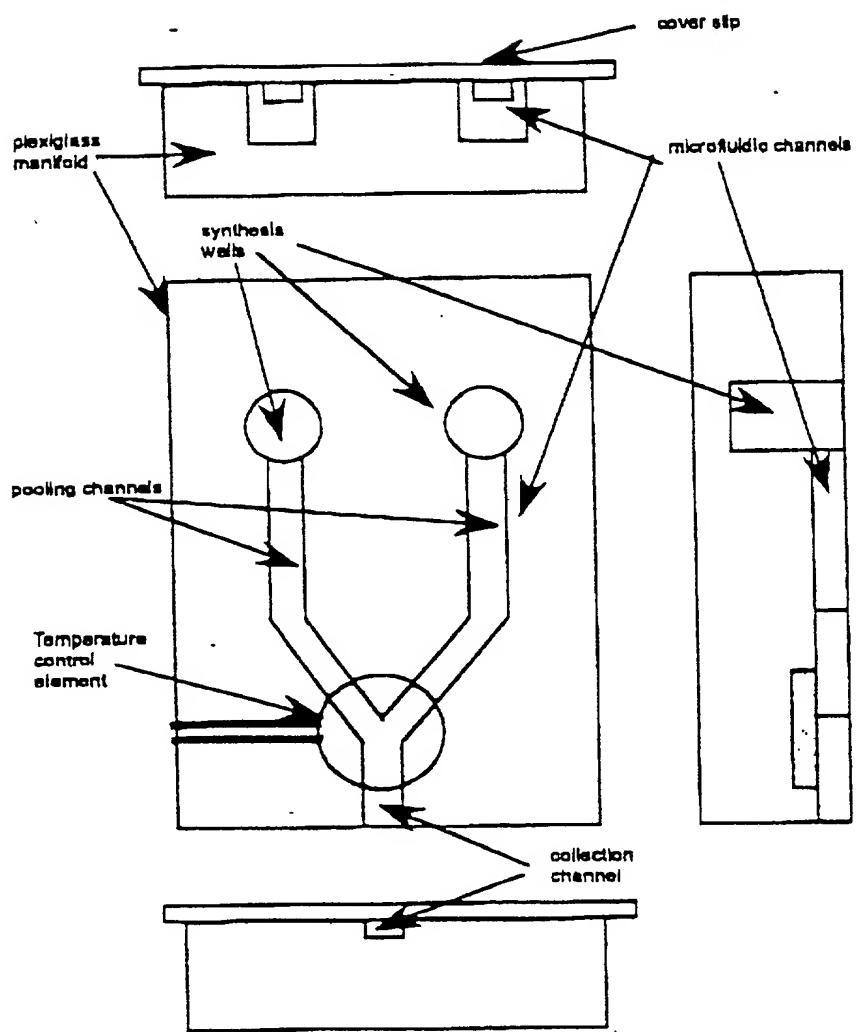


Figure 10

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Genewriter Platform Design
8 x 86 well plates addressed with 16 piezoelectric
nanovolume dispense heads; One wash/dry station
and one additional plate station. 8 plates evacuated by
a single vacuum station.

Capacity of 8 x 86 = 768 oligos/run

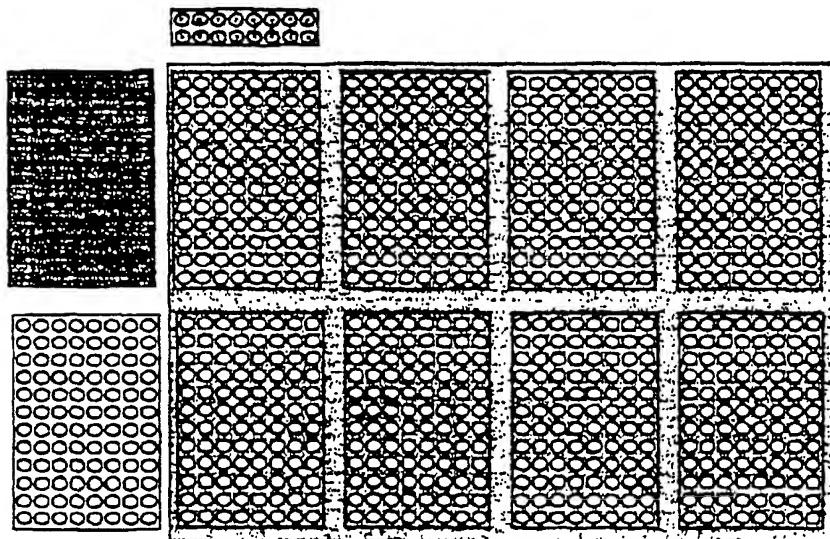


Figure 11

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Genewriter Platform Design - High Capacity Mode
8 x 1536 well microassay plates addressed with 16 piezoelectric
nanovolume dispense heads; One wash/dry station
and one additional plate station. 18 plates evacuated by
a single vacuum station.

Capacity of 8 x 1536 = 12,288 oligos/run

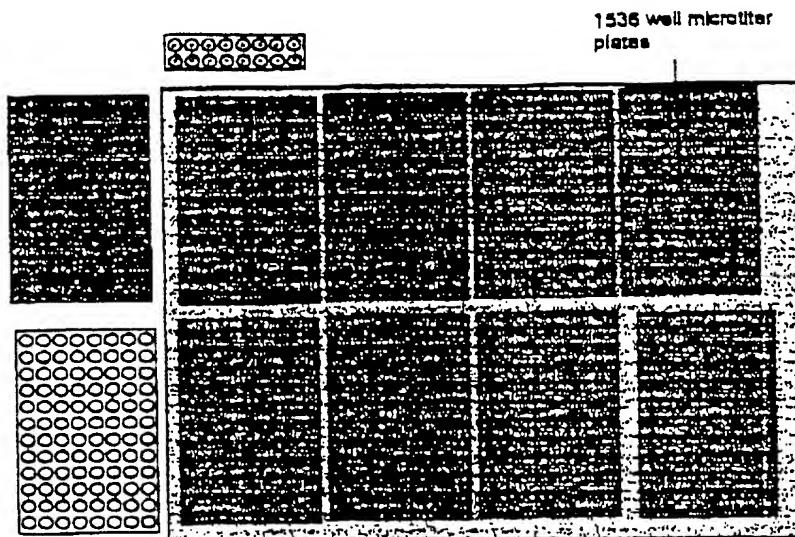


Figure 12

Inventor: Glen A. Evans
Attorney Docket No. P-EA 5160

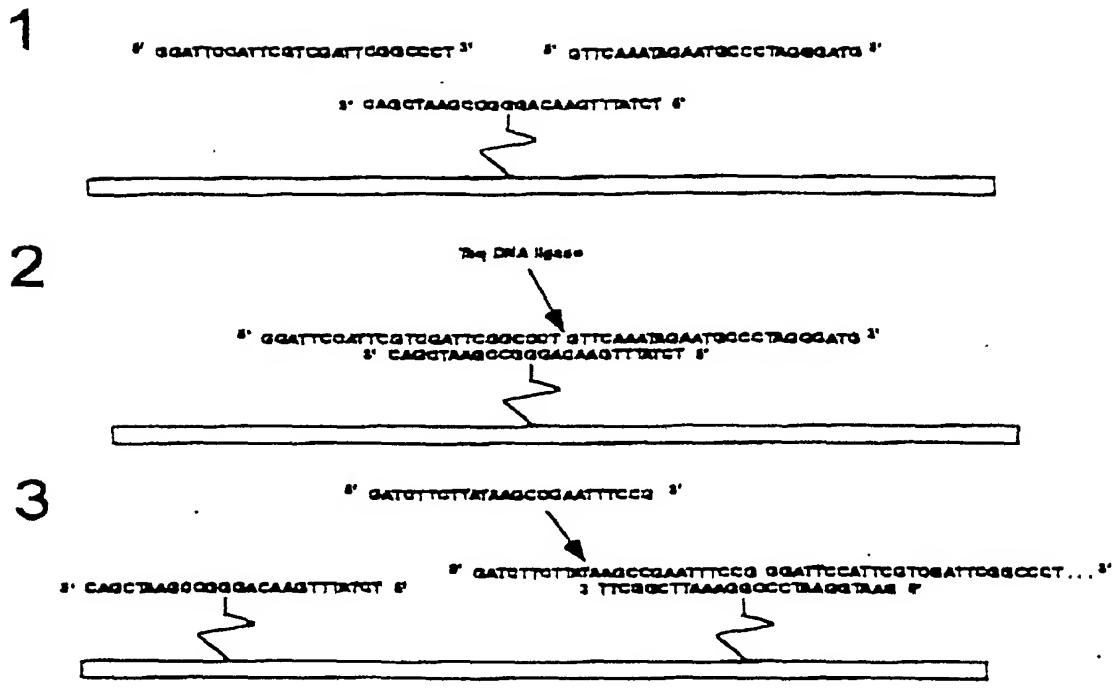


Figure 13

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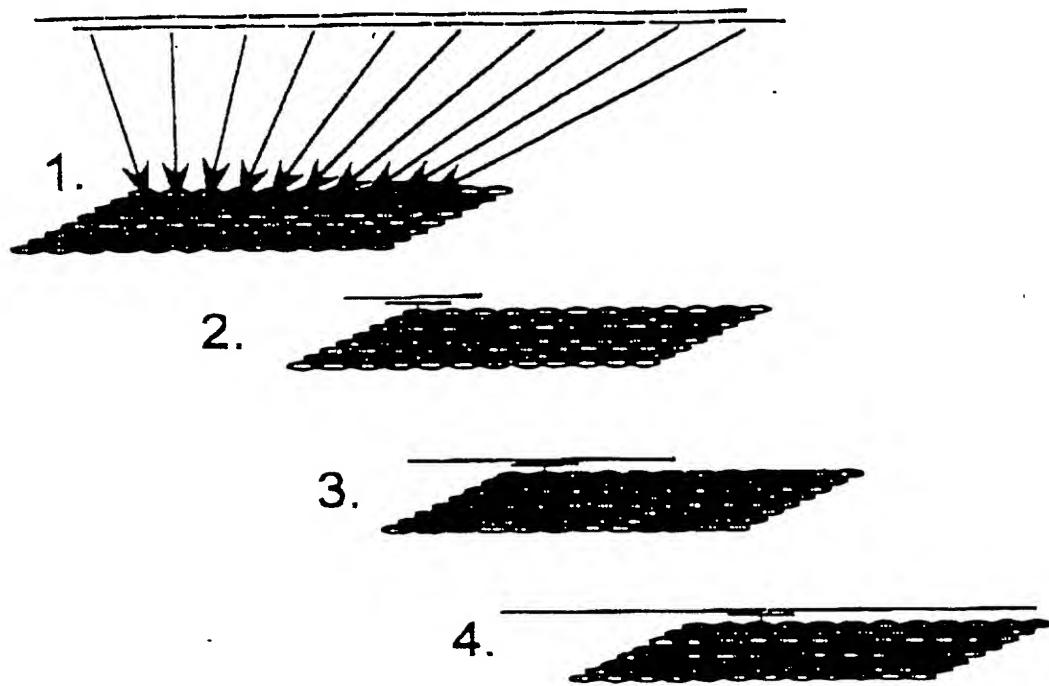


Figure 14

Inventor: Glen A. Evans
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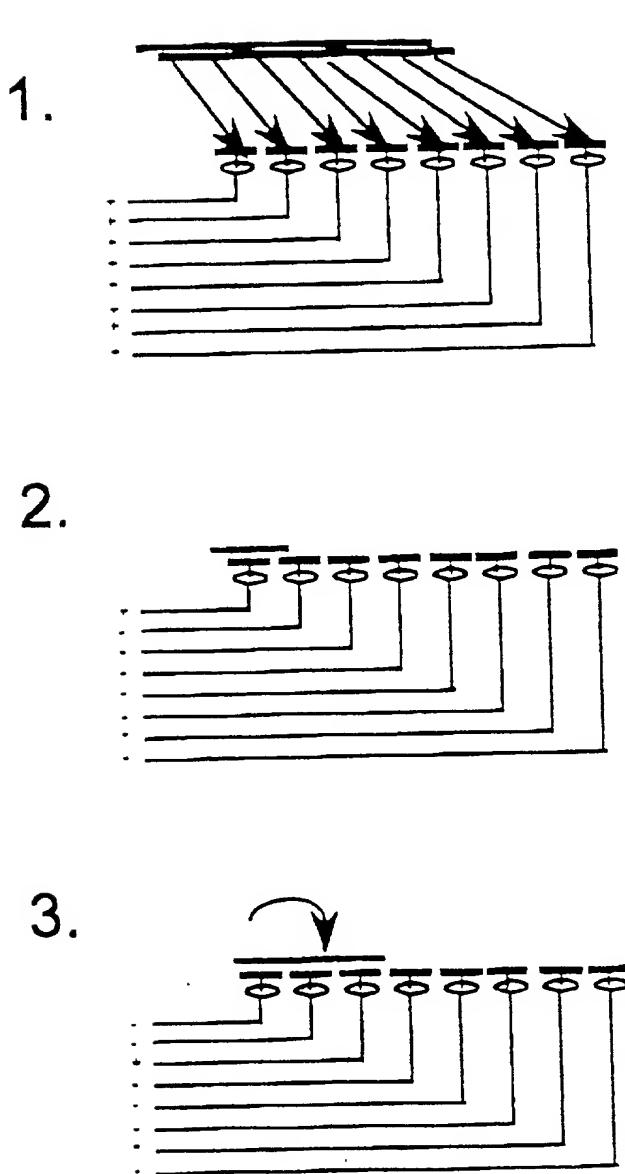


Figure 15

Bidirectional primer extension strategy for gene assembly

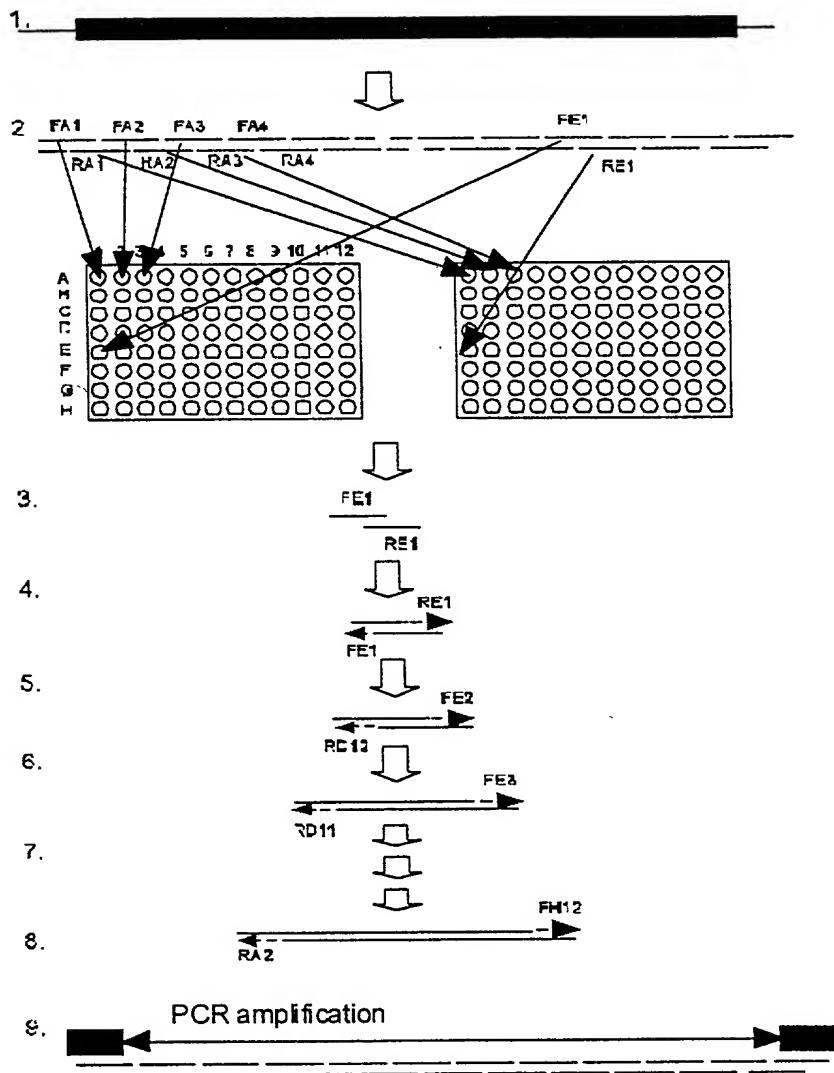


Figure 16

System Diagram for Genewriter

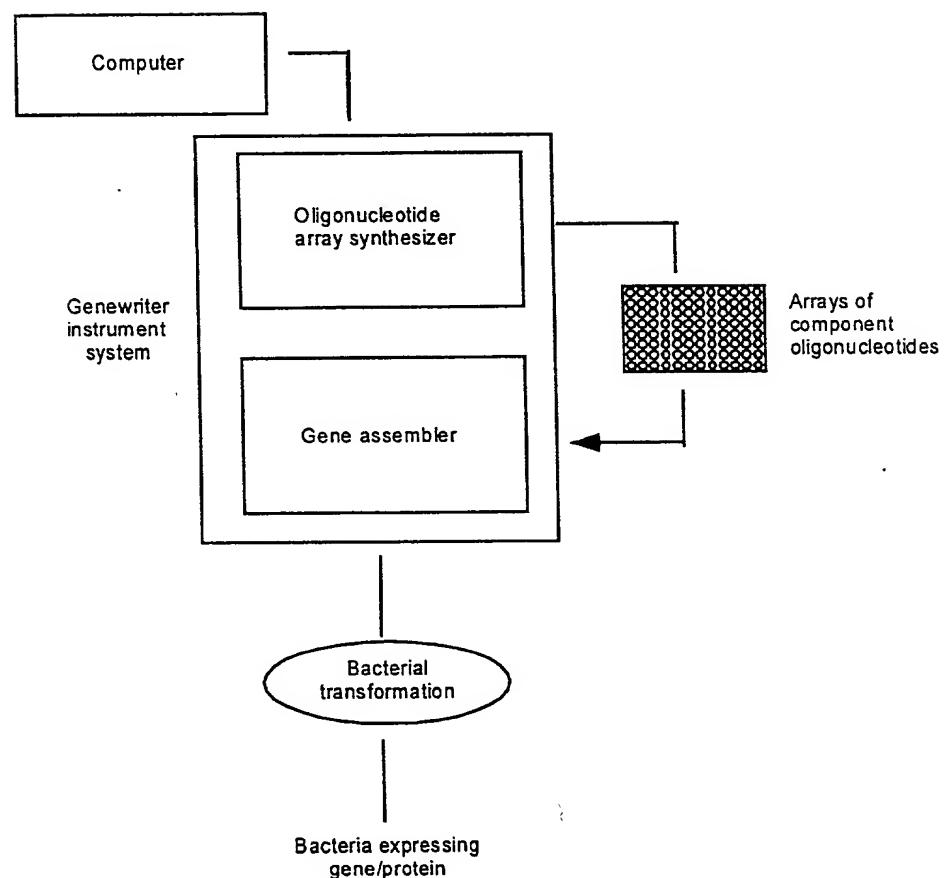


Figure 17

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Perspective view of Genewriter Instrument

Genewriter diagram

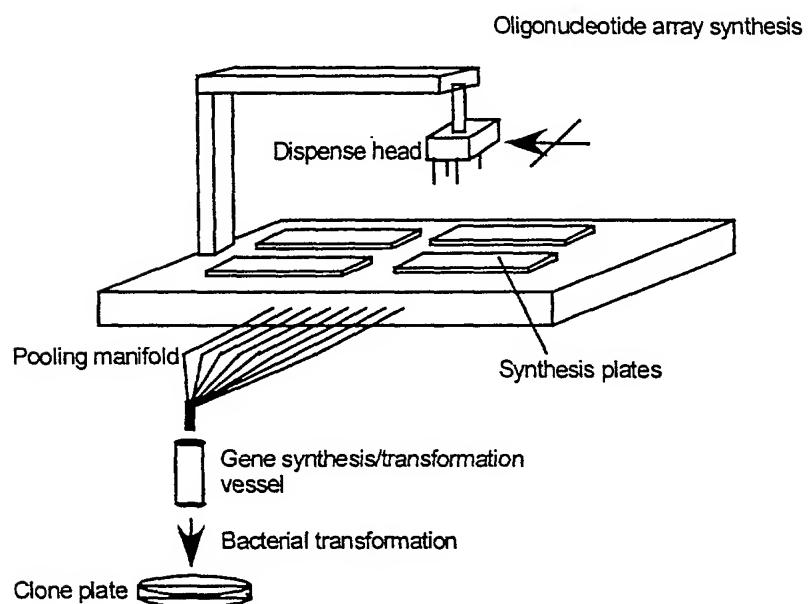


Figure 18